Submission Date: 01/14/2022

Chronology of Defect / Noncompliance Determination for Ford Motor Company Recall #22S01

Provide the chronology of events leading up to the defect decision or test data for the noncompliance decision.

June – September 2021 On June 1, 2021 the filter Tier-1 supplier notified Ford of three low mileage (800-9000 miles) warranty return parts that exhibited a leak from a pinhole opening on the upper center portion of the secondary fuel filter cap. Customers reported symptoms of a fuel leak or fuel smell. This topic was brought to Ford's Critical Concern Review Group (CCRG) for review. Upon further analysis, the supplier identified voids in the injection molding gate area of the cap. The secondary filter cap tool has two cavities. All three return parts were produced from cavity #1. Further investigation of suspect filter build dates and quality records identified a contamination issue that occurred with cavity #1 on September 18, 2020 between 9AM - 10:40AM. The contamination in the tool allowed for a potential void formation in the molded filter cap. A void in this area would not necessarily result in an immediate leak to atmosphere, which allowed assemblies to pass the subsequent pressure leak test. Ford engineering believes that, over time, a void may develop into a pinhole at the top center of the filter cap.

A review of production records found that the Tier-2 supplier produced 184 suspect caps prior to correction of the contamination concern. These caps were assembled into completed assemblies at the Tier-1 supplier on October 3, 2020 and passed their filter assembly pressure test. These 184 filters were mixed with other filter stock and then shipped to Ford's Chihuahua Engine Plant (ChEP) on October 28, 2020, and were then installed onto engines that were shipped to Ford. There is no engine serial number or VIN traceability to identify which engine or vehicle may contain a suspect filter.

October – November 2021 Ford continued efforts to review the supplier's quality and maintenance records for other potential suspect populations. Limited records were available, providing little additional insight into historical tool maintenance.

As of November 16, 2021, there have been 22 warranty claims for 2021MY F-Super Duty and Medium Duty trucks with customer and/or technician comments indicating secondary fuel filter leaks. Customers generally describe a fuel odor or a fuel leak from the engine compartment. The mileage at time-of-repair on these vehicles ranged from 510 to 19,401 miles. Six of these filters were returned for analysis and confirmed to be related to this concern.

On **January 7, 2022**, Ford's Field Review Committee reviewed the concern and approved a field action.

Ford is not aware of any reports of fire, accident or injury attributed to this tool contamination concern. There is one ambiguous report of an underhood fire from a vehicle built during the suspect timeframe; Ford did not have an opportunity to inspect this vehicle or filter.